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vided as rather large granules that are hard to drink. If it is drunk, charcoal is after all used as a universal antidote for poisons in many preparations and therefore certainly is not toxic to the body.

The material should be prepared as stated on the box—that is, put into water to wash away the fine charcoal dust that accumulates. The material is then dried. It weighs little and if kept in a lightweight plastic jar can be carried in a pack with no difficulty. Since backpackers have a great fetish for multiple uses, it is possible this material could be used also as an antidote for poison and even as a fire starter if necessary but since I have not tried either, I do not advocate them nor even feel that they are practical.

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## **Access to PaperChase**

TO THE EDITOR: Since the article "Bringing the Medical Literature to Physicians—Self-Service Computerized Bibliographic Retrieval" was published, physicians with personal computers and modems have written to us to ask how they could dial into PaperChase.

PaperChase is made available on a not-for-profit basis by the Beth Israel Hospital, Boston. Further information about PaperChase together with access numbers and a trial password can be obtained by calling the toll-free number (800) 722-2075, or by writing to the following address:

> PaperChase Beth Israel Hospital Boston, MA 02215

> > HOWARD L. BLEICH, MD LISA H. UNDERHILL, MS Beth Israel Hospital 330 Brookline Ave Boston, MA 02215

### REFERENCE

1. Underhill LH, Bleich HL: Bringing the medical literature to physicians—Self-service computerized bibliographic retrieval, *In Medical Informatics* [Special Issue]. West J Med 1986 Dec; 145:853-858

# Scuba Diver's Thigh or the Bends?

TO THE EDITOR: As a scuba diving instructor I was more than passingly interested in the letter from Dr Greenhouse and Ms Page in the November 1986 issue. Their diagnosis of a special case of meralgia paresthetica, which they title "Scuba Diver's Thigh," sounds suspiciously like a classic case of the bends.

The bends are typically triggered by a too-rapid drop in ambient pressure. This allows nitrogen dissolved into the tissues to come out of solution faster than it can be transported to the lungs. If the released bubble were to manifest itself in the soft tissues surrounding the nerves it could create the pressure points Dr Greenhouse ascribes to the diver's weight belt. The amount of nitrogen dissolved into the various tissues is a function of the tissue type, pressure (due to depth of the dive) and the time spent breathing pressurized gasses.

With that in mind, I suspect the bends for two reasons.

First, and most important, the patient's dive was done to 80 feet for 50 minutes. As there was no mention of a decompression stop, I assume none was made.

If so, then the bends sounds quite likely. The US Navy decompression tables require a ten-minute stop at 10 feet specifically to allow a gradual release of microscopic nitrogen bubbles. The more conservative table used by the British Royal Navy goes off-scale and does not even list a decompression schedule for the dive she did. The closest listed dive (78 feet for 45 minutes) requires spending 5 minutes at 33 feet and an additional 25 minutes at 16 feet. Clearly, a dive to 80 feet for 50 minutes is not a wise thing to do.

It should also be pointed out that the above quoted decompression stops are for ocean diving only. If the dive was done at Lake Tahoe, which is near Dr Greenhouse's Reno practice, then additional factors are introduced. The two most significant of these are the decrease in atmospheric pressure due to the 6,000 foot altitude and the change in the specific gravity of the water. Under these conditions the US Navy required decompression schedule increases to one stop at 20 feet for 11 minutes followed by a second stop at 10 feet for 46 minutes. This is a total of 57 minutes in the water decompressing from a 50 minute dive. And again, the British table does not acknowledge the feasibility of the dive.

Presuming the dive was actually done in the ocean and the US Navy required decompression stops were completed, there still exists a possibility of the bends. The National Underwater Accident Data Council estimates the chances of the bends to be about 8 in 100,000, even when proper precautions are taken.

Second, the described symptoms of numbness lasting several weeks is classic to a bends hit caused by bubble formation in the vicinity of a nerve.

Contrast this to Dr Greenhouse's report of no similar cases of nerve damage due to weight belt pressure and the lack of abdominal enlargement, usually present with meralgia paresthetica.

As I am not a physician I won't go any further into the physiology. However, susceptibility to the bends is increased after its first occurrence. As such, I would like to suggest that Dr Greenhouse contact the Divers Alert Network (DAN) at Duke University Medical Center. They are a nonprofit organization dedicated to diving medicine and have both emergency phones (919) 684-8111 and an information line (919) 684-2948.

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## Dr Greenhouse Responds

TO THE EDITOR: Mr Robert Fritz proposed that "Scuba Diver's Thigh" was actually due to the bends. Regarding his comments, the dives were made at sea level by a person